

Subject Company: Genesis Lease Limited
Exchange Act Commission File No: 1-33200

The following press release, dated September 18, 2009, entitled “AerCap and Genesis Lease to Merge in an All Share Transaction”, was issued in connection with the Agreement and Plan of Amalgamation, dated as of September 17, 2009, among AerCap Holdings N.V. (“AerCap”), Genesis Lease Limited (“Genesis”) and AerCap International Bermuda Limited (the “Amalgamation Agreement”).

The Amalgamation Agreement, under which Genesis will amalgamate with a wholly-owned subsidiary of AerCap, was filed by AerCap under cover of Form 6-K today and is incorporated by reference into this filing.



PRESS RELEASE

FOR IMMEDIATE RELEASE

AerCap and Genesis Lease to Merge in an All Share Transaction

Genesis' modern aircraft portfolio and strong generation of free cash flow combined with AerCap's strong contracted growth with a substantial order book of the most fuel-efficient, state-of-the-art aircraft will create the world's leading independent aircraft leasing company with total assets of approximately \$8 billion

Amsterdam, Netherlands/Shannon, Ireland; September 18, 2009 — AerCap Holdings N.V. (“AerCap”) (NYSE: AER) and Genesis Lease Limited (“Genesis”) (NYSE: GLS) today announced that their Boards of Directors have approved a definitive agreement under which AerCap and Genesis will merge in an all share-for-share transaction. Under the terms of the

amalgamation agreement, Genesis shareholders will receive one AerCap ordinary share for every Genesis common share they own.

Genesis will become a wholly-owned subsidiary of AerCap. AerCap's CEO Klaus Heinemann and CFO Keith Helming will lead the combined company, which will retain the name AerCap. Three directors from Genesis will be nominated for election to the Board of Directors of AerCap at an extraordinary general meeting of AerCap shareholders to be called and held shortly after the consummation of the transaction.

Based on Genesis' balance sheet, the transaction has a value of \$1.75 billion and, based on the closing stock price for AerCap Holdings N.V. ordinary shares on Thursday, September 17, 2009, the share-for-share consideration has a value of \$8.81 per Genesis ADS (each ADS representing one Genesis common share). The one-for-one exchange ratio represents an average premium to Genesis shareholders of 45% based on the daily closing prices of Genesis ADS and AerCap ordinary shares during the 30 day trading period from July 31, 2009 to September 11, 2009. Upon closing of the transaction, Genesis shareholders are expected to own approximately 29% of the combined company.

The transaction is subject to approval by Genesis shareholders, satisfaction of customary closing conditions and receipt of any necessary regulatory approvals. The transaction is expected to close in the fourth quarter of 2009.

AerCap's CEO Klaus Heinemann commented, “The merger of Genesis and AerCap enhances the cash generation of the combined company in the current environment to pursue our growth objectives and capitalize on opportunities as the market recovers. Like AerCap, Genesis boasts the most modern, fuel-efficient and in-high-demand jets that are fully financed and on lease to a diverse operator base, including many new customers not currently in the AerCap portfolio. The similarity of our respective aircraft portfolios, combined with AerCap's substantial order book, make this an attractive transaction for all stakeholders.

Following this transaction, AerCap will become the leading independent franchise within the global aircraft leasing sector, with 116 airline customers in 50 countries and a lease portfolio currently valued at \$6 billion, with another 83 aircraft on order or under purchase contract.”

John McMahon, Chairman & CEO of Genesis added, “Genesis' board and management are committed to enhancing shareholder value. This transaction, through the solid profitability and strong cash flows of Genesis, combined with AerCap's scale and order book, which is nearly all placed, provides our shareholders with a significant and immediate premium to recent stock trading levels and positions them to participate in enhanced earnings and business growth in the future.”

As part of the agreement, GE Capital Aviation Services (GECAS), which has acted as servicer for Genesis' portfolio, will continue to provide most asset management services for the Genesis fleet in the near term. GECAS has, however, agreed with AerCap a means to terminate early the GECAS services at AerCap's option. Additionally, AerCap has signed a letter of intent to purchase 13 aircraft from GECAS. The purchase of two aircraft is expected to occur by the end of September 2009 and the purchase of the remaining aircraft is expected to take place after and is subject to the closing of the transaction announced today.

The combined company will have a total fleet of 358 commercial aircraft and 83 engines that are either owned, on order, under contract or letter of intent, or managed. The average age of its owned aircraft fleet is 6.6 years.

Advisors

Morgan Stanley and UBS acted as financial advisors and Milbank, Tweed, Hadley & McCloy LLP, NautaDutilh N.V., and Mello, Jones & Martin as legal advisors to AerCap. Shared Value and Weber Shandwick acted as communications advisors to AerCap. Citi acted as financial advisor and Weil, Gotshal & Manges LLP, Conyers Dill & Pearman and Houthoff Buruma N.V. as legal advisors to Genesis. KCSA Strategic Communications acted as communications advisor to Genesis.

Conference Call

In connection with this announcement, AerCap and Genesis will host a conference call today, Friday, September 18, 2009 at 2:30 pm Central European Time / 1:30 pm Irish Time / 8:30 am Eastern Time. The call can be accessed live by dialing 888-935-4575 (US/Canada — toll free) or +1-718-354-1387 (International) and referencing code 4656488 at least 5 minutes before start time, or by visiting AerCap's website at <http://www.aercap.com> or Genesis' website at <http://www.genesislease.com> under "Investor Relations."

The presentation slides for the conference call will be posted on AerCap's and Genesis' website in advance of the call. A replay of the call will be available beginning at 12:00 pm Eastern Time on September 18, 2009 and continuing through October 18, 2009. To access the recording, call 866-932-5017 (US/Canada — toll free) or +1-347-366-9565 (International) and enter passcode 4656488. The replay will be archived in the "Investor Relations" section of AerCap's and Genesis' website.

About AerCap

AerCap is an integrated global aviation company with a leading market position in aircraft and engine leasing, trading and parts sales. AerCap also provides aircraft management services and performs aircraft maintenance, repair and overhaul services and aircraft disassemblies. AerCap is headquartered in The Netherlands and has offices in Ireland, the United States, Singapore, China and the United Kingdom.

About Genesis

Genesis is a global commercial aircraft leasing company that is headquartered in Shannon, Ireland. Genesis acquires and leases modern, operationally efficient passenger and cargo jet aircraft to a diverse group of airlines throughout the world.

Forward Looking Statements

This press release may contain certain statements, estimates and forecasts with respect to future performance and events. These statements, estimates and forecasts are intended to be covered by the safe harbor for "forward-looking statements" provided by the U.S. Private Securities Litigation Reform Act of 1995. In some cases, such forward-looking statements can be identified by the use of forward-looking terminology such as "may," "might," "will," "should," "expect," "plan," "intend," "estimate," "anticipate," "believe," "predict," "potential" or "continue" or the negatives thereof or variations thereon or similar terminology. All

forward-looking statements included in this press release are not statements of historical fact but are based on various underlying assumptions and expectations and are subject to known and unknown risks, uncertainties and assumptions, and may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events. There are important factors that could cause our actual results, level of activity performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied in any forward-looking statements. As a result, there can be no assurance that any forward-looking statements included in this press release will prove to be accurate or correct. In light of these risks, uncertainties and assumptions, the future performance or events described in any forward-looking statements in this press release might not occur. Among the factors that could cause actual results to differ materially from those described in any forward looking statements are factors relating to satisfaction of the conditions in the amalgamation agreement between AerCap and Genesis, AerCap's ability to successfully combine the businesses of AerCap and Genesis and to realize expected synergies from the combination, and changes in global, political, economic, business, competitive, market and regulatory forces, as well as those factors described under the headings 'Risk Factors' in AerCap's and Genesis' respective annual reports on Form 20-F for the year ended December 31, 2008, as filed with the US Securities and Exchange Commission (the "SEC"). Copies of such annual reports on Form 20-F are available online at <http://www.sec.gov> or on request from the applicable company. Except for any obligation to disclose material information under federal securities laws, AerCap and Genesis do not undertake any obligation to, and will not, update any forward-looking statements, whether as a result of new information, future events or otherwise.

Accordingly, you should not rely upon forward-looking statements as a prediction of actual results and AerCap and Genesis do not assume any responsibility for the accuracy or completeness of any of these forward-looking statements.

Additional Information About This Transaction

In connection with the proposed transaction, AerCap will file with the SEC a Registration Statement on Form F-4 that will include a proxy statement of Genesis and a prospectus of AerCap. Genesis will mail the proxy statement/prospectus to its stockholders. **Genesis investors are urged to read the proxy statement/prospectus (including all amendments and supplements to it) regarding the proposed transaction when it becomes available because it will contain important information.** You may obtain copies of all documents filed with the SEC regarding this transaction, free of charge, at the SEC's website (www.sec.gov). These documents may also be obtained free of charge from AerCap's website (<http://www.aercap.com>) under the heading "Investor Relations" and then under the heading "SEC Filings" or by directing a request to AerCap's Investor Relations at +31 20 655 9658. Copies of Genesis' filings may be obtained free of charge from Genesis' website (<http://www.genesislease.com>) under the heading "Investor Relations" and then under the heading "SEC Filings" or by directing a request to Genesis' Investor Relations at +1-212-896-1249.

This press release shall not constitute an offer to sell or the solicitation of an offer to buy any securities, nor shall there be any sale of securities in any jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such jurisdiction. No offering of securities shall be made except by means of a prospectus meeting the requirements of the U.S. Securities Act of 1933, as amended, or an exemption therefrom.

4

Contact Information

Contacts for AerCap

For Investors:

Peter Wortel
Investor Relations
+31 20 655 9658
pwortel@aercap.com

For Media:

Frauke Oberdieck
Corporate Communications
+31 20 655 9616
foberdieck@aercap.com

Contacts for Genesis

For Investors and Media:

Jeffrey Goldberger
KCSA Worldwide
+1.212.896.1249
jgoldberger@kcsa.com

Marybeth Csaby
KCSA Worldwide
+1.212.896.1236
mcsaby@kcsa.com

5
